



TOBB Ekonomi ve Teknoloji Üniversitesi

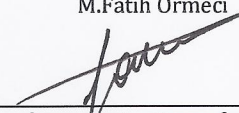
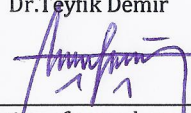
TOBB University of Economics and Technology

## BIOMECHANICAL TEST REPORT

**No. 24072012-42-01**

**Customer:** Mode Medikal San. ve Tic. Ltd.  
**Customer's Address:** Abdi İpekçi Cad. Ak Makina İş Merkezi No:58 Bodrum  
Kat B.Paşa İstanbul/TURKEY  
**Authorized Person:** Oğuz AKYÜZ  
**Trade Mark:** Mode Medikal  
**Subject:** Dynamic Fatigue Test for Endosseous Dental Implants -  
ISO 14801  
**Product Name:** Dental ImplantKA  
**Date of receipt:** 06.07.2012  
**Material:** Ti Grade 4 (ISO 5832-2)  
**Lot Number:** N.A.  
**Catalog Number:** N.A.  
**Specimen Size:** 10 (Ø4,1)mm  
**Specimen Quantity:** 9  
**Test Number:** 0607124202  
**Report Number:** 24072012-42-01  
**Report Date:** 24.07.2012

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Test Period	Principle Engineer	Head of Biomechanics Laboratory
18.07.2012 - 24.05.2012	M.Fatih Örmeci 	Dr.Teyfik Demir 

*This test method is intended to provide a characterization of mechanical properties of tested specimens. It is not the intention of this specification to define levels of performance or case specific clinical performance of these devices, as insufficient knowledge to predict consequences of the use of any of these devices in individual patients for specific activities of daily living is available.*



Table I.A.1 Specimen Identification and Test Conditions

Test Number	0607124202
Manufacturer	Mode Medikal San. ve Tic. Ltd.
Product Name	Dental ImplantKA
Material	Ti Grade 4 (ISO 5832-2)
Lot Number	N.A.
Catalog Number	N.A.
Specimen Quantity	9
Specimen Size [mm]	10 (Ø4,1)
Surface Finish	Sandblasted
Length [mm]	10
Frequency [Hz]	2
Load Ratio (max/min)	10
Load Wave Form	Sinusoidal



Figure I.A.2 Specimen.

Test Period 18.07.2012 – 24.05.2012	Principle Engineer M.Fatih Örmeci	Head of Biomechanics Laboratory Dr.Teyfik Demir
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## 2. Test Results

Table I.A.2 Results of Fatigue Properties of Tested Specimens

Sample	Load [N]	Maximum Bending [Nm]	Cycle	Remark	Test Machine Serial Number
1.1	1008	1,008	1	Failed	2012PY02
1.2	136	1,36	2 000 000	Secured	2012PY01
1.3	621	6,21	718 114	Failed	2011HY01
1.4	216	2,16	2 000 000	Secured	2012PY03
1.5	356	3,56	2 000 000	Secured	2012PY03
1.6	519	5,19	367 487	Failed	2011HY01
1.7	360	3,6	2 000 000	Secured	2012PY02
1.8	353	3,53	2 000 000	Secured	2012PY01
1.9	739	7,39	13 846	Failed	2012HY01

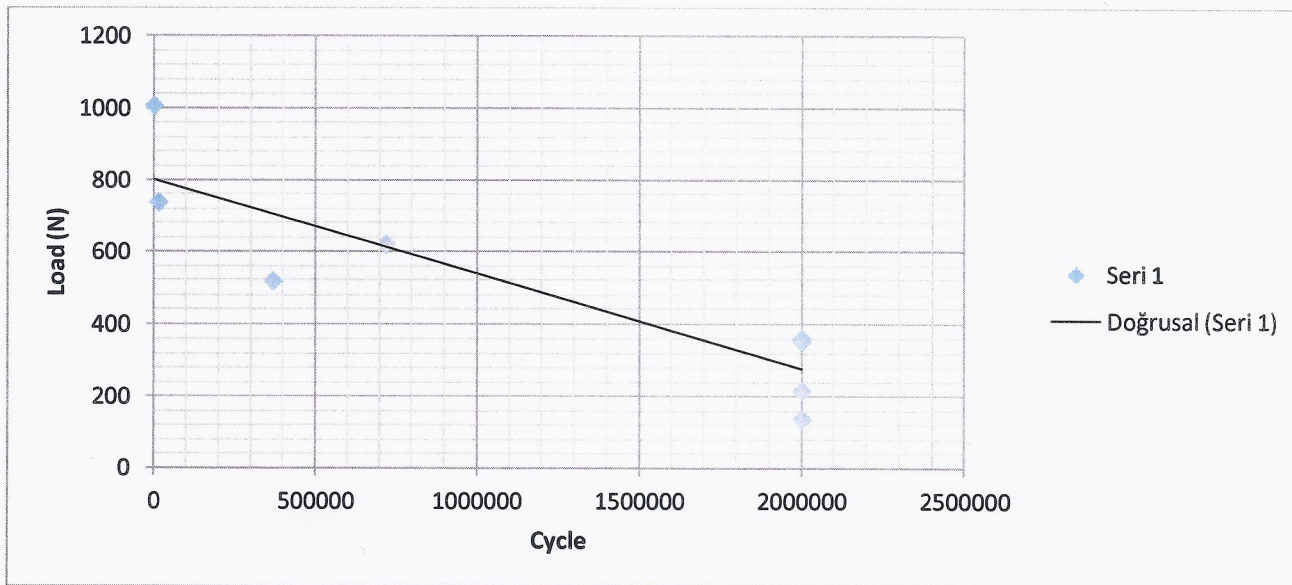


Figure I.A.3 Load vs Cycle diagram generated by tested specimens.

Test Period 18.07.2012 - 24.05.2012	Principle Engineer M.Fatih Örmeci	Head of Biomechanics Laboratory Dr.Teyfik Demir
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